

**REMARKS**

Claims 1-16 are all the claims pending in this application. Claims 5-12 have previously been withdrawn. Claims 1-4 have been amended and claims 13-16 have been added herein. This Response, submitted in reply to the Office Action dated July 23, 2008, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

**Preliminary Matters**

Applicant notes that on the initialed IDS returned with the Office action of February 7, 2008, the Examiner indicated that copies and translations of two of the references were not provided. However, the Patent Application Information Retrieval Database indicates that the references and translations were received by the Patent Office on November 13, 2007, when the IDS was filed. Applicant's representative contacted the Examiner on February 11, 2008 regarding this matter, and the Examiner indicated that she would issue a corrected copy of the initialed IDS. However, a corrected copy of the initialed IDS has not been issued. Applicant respectfully requests that the Examiner return a corrected copy of the initialed IDS form indicating that the reference and translation have been received.

Additionally, Applicant wishes to thank the Examiner for indicating that the subject matter of claim 4 is allowable if rewritten in independent form including the limitations of the base claims and any intervening claims.

**Claim Rejections - 35 U.S.C. § 112**

The Examiner has rejected claim 1 under 35 U.S.C. §112, because she asserts that the limitation “the circumferential wall” as used in line 4, lacks antecedent basis. Applicant respectfully submits that claim 1 has been appropriately amended herein, and all of the Examiner’s concerns have been fully addressed. Therefore, Applicant respectfully requests that this rejection be withdrawn.

**Claim Rejections - 35 U.S.C. § 102**

Claims 1 and 2 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Kostrov et al. (U.S. 6,706,006; henceforth “Kostrov”). Applicant respectfully traverses this rejection.

**Claim 1**

Claim 1 recites, in part:

...a vessel body whose profile has a shape that is at least one of cannonball-like, circular-truncated, half-spherical, and shaped so as to have a swelled part at the rear, said vessel body having a hollow portion whose profile is converged from its rear part side to its front part side...

Conversely, Kostrov teaches a vessel body which has a profile with a straight shape, and does not teach a the vessel body having a shape that is “cannonball-like, circular-truncated, half-spherical, and shaped so as to have a swelled part at the rear” as claimed.

Further, claim 1 recites, in part:

...an air/liquid jet-guiding portion that is disposed at the outer circumferential portion of said air/liquid jetting port, is widened to open from said air/liquid jetting port toward the jetting direction and is formed to be at least one of circular-truncated, half-spherical, and disk-shaped...

Kostrov does not teach an air/liquid jet guiding portion having the claimed structure, but instead teaches the output port having straight sides, which are not circular-truncated, half

spherical, or disk-shaped. Therefore, Applicant respectfully submits that Kostrov does not teach this feature of claim 1.

Further, claim 1 recites, in part:

...a flow-out portion composed of at least one of: notches provided in the front end portion of the air/liquid jet guiding portion and ports formed at the front part side of the air/liquid jet guiding portion...

As shown in the exemplary embodiment of Fig. 3 of the present application, these notches 7, allow water to flow out the sides of the flow output portion 6.

In paragraph 6 of the Office Action and with respect to this feature, the Examiner asserts that Kostrov discloses a flow output portion composed of notches and asserts that element 9 of Fig. 2-4 corresponds to these notches. However, Kostrov merely describes element 9 as corresponding to pins, which, in an alternate embodiment, can be replaced with rollers. Kostrov provides no teachings that these pins are notches which form part of a flow-output portion as claimed. Therefore, Applicant respectfully submits that Kostrov does not teach this feature of claim 1.

For at least the above discussed reasons, Applicant respectfully submits that claim 1 and all claims dependant thereon are patentable over the applied reference.

#### Claim 2

Further, claim 2 recites:

...an air self-suction port that is opened and formed on the rear wall of said vessel body and at a position deviated from at least one of: the axial center of said vessel body and an air axis formed in said vessel body...

As shown in Fig. 3, exemplary embodiments of claim 2 have an air self-suction port 5 formed **at rear side of the vessel body opposite** the air/liquid jetting port formed at the front side of the vessel body.

Conversely, Fig. 3 of Kostrov shows an outlet port (which the Examiner analogizes to an air self-suction port) 14, which is aligned opposite the nozzle 13, and not aligned opposite the air/liquid jetting port 15. Further, the outlet port 14 is disposed on a side surface of the vessel body and is **perpendicular** to an air axis on the center line of the air/liquid jetting port 15. The outlet portion of Kostrov is not located at a rear side of a vessel body and is not opposite the air/liquid jetting port located at a front side of the vessel body. Therefore, Applicant respectfully submits that claim 2 is patentable over Kostrov for at least the above discussed reasons.

For the reasons set forth above, Applicant respectfully requests that the rejection of claims 1 and 2 be withdrawn.

**Claim Rejections - 35 U.S.C. § 103**

Claim 3 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kostrov in view of Martin (U.S. 6,962,298 B1). Applicant respectfully traverses this rejection.

Claim 3 recites:

...a rotating member that is attached by being screwed in a threaded portion or being fitted to a fitting portion, which is opened and formed at the rear wall of said vessel body and is rotatably provided in a covered manner at the rear wall, centering around the position deviated from the axial center of said vessel body or the air axis formed in said vessel body, wherein said air self-suction port is formed on said rotating member and formed at a position deviated from the rotating axis of said rotating member

In other words, an apparatus consistent with claim 3 includes “a rotating member...rotatably provided in a covered manner at the rear wall....”

In rejecting claim 3, The Examiner acknowledges that Kostrov does not teach a rotating member. Instead, the Examiner points to element 16 of Martin as corresponding to a rotating member. However, the rotating member 16 and the air self-suction port 93 of Martin are disposed on a lateral face, while the air/liquid jetting port is on the front side of the vessel body. Therefore,

Applicant respectfully submits that the combination of Kostrov and Martin does not teach or suggest the above discussed feature of claim 3.

Further, Martin does not cure the above discussed deficiencies of Kostrov, and therefore, Applicant also submits that claim 3 is patentable at least by virtue of its dependency upon claim 1 and respectfully requests that this rejection be withdrawn.

**Newly added claims**

Claims 13 and 14 have been added herein and depend from claims 1 and 2, which have been shown above to be patentable over the applied references. Therefore, Applicant respectfully submits that these claims are patentable at least by virtue of their dependency and respectfully requests that these claims be allowed.

**Allowable Subject Matter**

As discussed above, the Examiner indicated that claim 4 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Independent claims 15 and 16 have been added herein. Claim 15 includes the subject matter of claim 4 rewritten in independent form including the subject matter of claims 1 and 2, from which claim 4 depends. Further, claim 16 includes the subject matter of claim 4, rewritten in independent form including the subject matter of claims 1, 2, and 3 from which claim 4 also depends. Therefore, Applicant respectfully submits that these claims are allowable, and respectfully requests that they be allowed.

**Response to Examiner's Statement of Allowable Subject Matter.**

In indicating that claim 4 was allowable, the Examiner provides a statement of the reasons for the indication of allowable subject matter. Applicant respectfully submits that claim 4 is allowable based on the combination of features recited therein, and should not be limited by any paraphrasing of the features made by the Examiner.

**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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